

About
BANANAS



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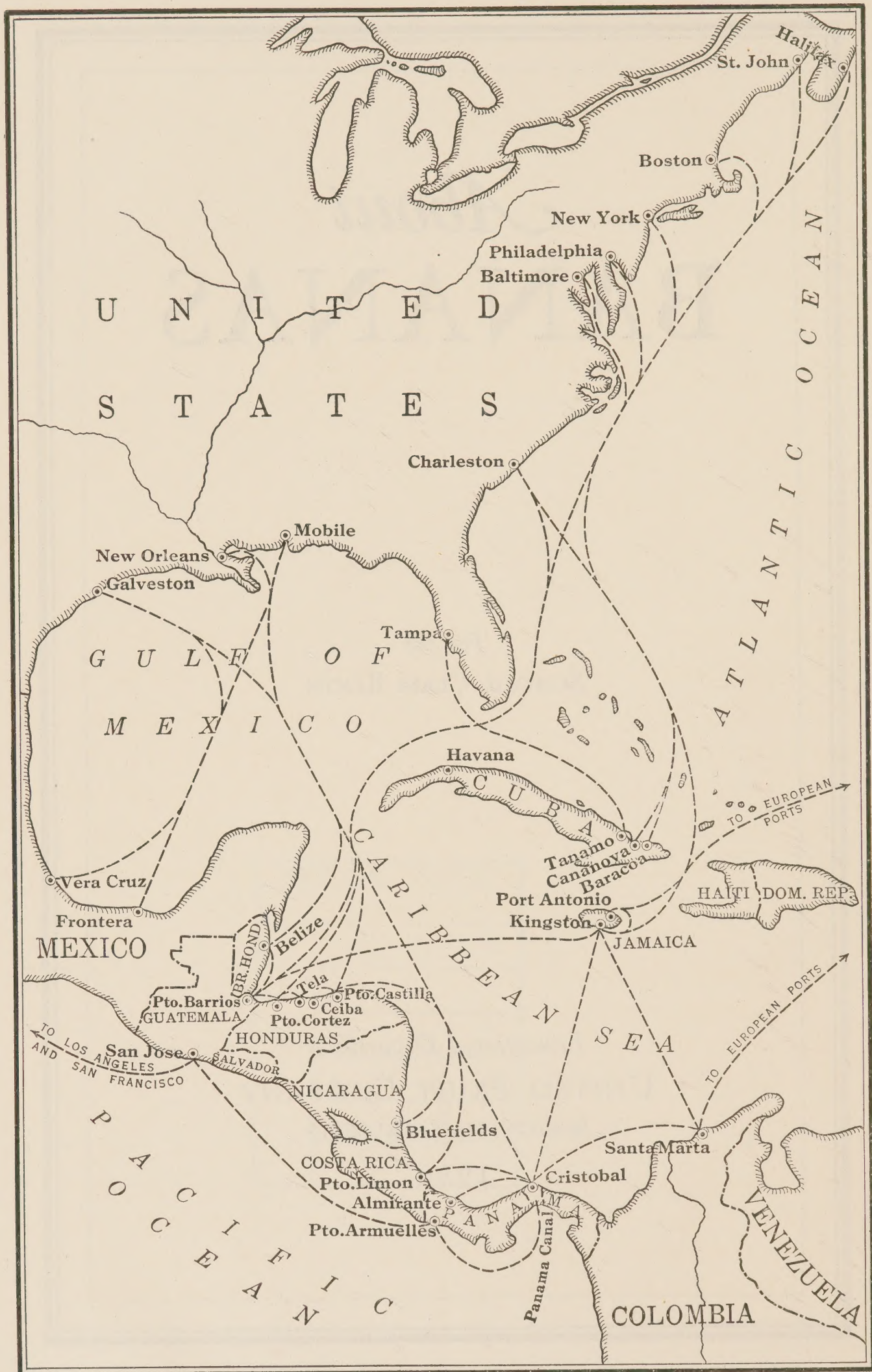
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About
BANANAS

For the
SCHOOL CLASS ROOM

Educational Department
UNITED FRUIT COMPANY
BOSTON, MASSACHUSETTS

1930



About BANANAS

"The most delicious thing in the world is a banana."

—BENJAMIN DISRAELI

THE romantic history of the banana is little known, and for that reason is perhaps the more fascinating. It is a story that brings together the adventures of explorers and missionaries, and the researches of botanists, archeologists and geographers in the record of dim centuries. In modern times the story includes a great variety of scientific study and inventive genius, devoted to the cultivation of the fruit and its transportation from the tropics to the consumer.

The Banana Family

The banana belongs to the large botanical family of the Musaceae. The leading member of this family is the genus *Musa*, since it includes all the edible bananas.

There are many species of *Musa*, of which the most important commercially are: first, *Musa sapientum* (Fruit of the Wise Men), so named because of a legend that the ancient sages of India reposed in the shade of the banana tree and refreshed themselves with its fruit, and found growing in the West Indies and on the American mainland, from the Tropic

of Cancer to the Tropic of Capricorn; second, *Musa Cavendishii* (Cavendish or dwarf variety), found principally in the Canary Islands, on the African mainland, in portions of Asia and in the islands of the Pacific and Indian oceans; and third, *Musa paradisiaca* (Fruit of Paradise), deriving its name from the legend that the banana tree flourished in the Garden of Eden. This last named species, known as the plantain, grows luxuriantly throughout the moist, tropical regions of both hemispheres, where it is a staple food. Botanically, the banana and the plantain are very similar, and in early literature they are not clearly distinguished. Plantains, of which there are several varieties, are always cooked as a vegetable and never used as a fruit.

The outstanding variety of *Musa sapientum* is the Gros Michel. This is the chief banana of commerce, and is the principal variety grown in the American tropics. The less familiar red banana is another variety of this species.

Other species of the genus *Musa*, with seed-bearing and inedible fruit, are useful for their fibre: for example, *Musa textilis* (Manila hemp); and *Musa basjoo*, used in Japan for coarse fabrics; while still others are merely ornamental plants.

The cultivated varieties of the edible banana, including the plantain, do not usually produce fertile seeds. The development of the edible banana from the seed-bearing varieties of scant or no food value probably occurred during man's struggle against famine in the early stages of civilization.

How the Banana Circled the World

✓ Far older than history is the use of the banana as a food for man. Its earliest home is presumed to have been in the humid tropical regions of southern Asia, where we know that at a much later period (327 B.C.) the armies of Alexander the Great found it abundant in the valley of the Indus.

Man early discovered that the roots, even though dried and carried long distances, would flourish in suitable soil and

climate. In the great migrations from southern Asia, the banana was carried eastward to the islands of the Pacific.

The Arabs obtained the fruit in India, and probably introduced it into the Holy Land and northern Egypt, where it was unknown before the Mohammedan conquest of 650 A.D.

By the trade which flourished across the Indian Ocean in the first ten centuries of the Christian era, the banana was established on the east coast of Africa. With their traffic in ivory and slaves, the Arabs gradually carried the fruit from tribe to tribe across equatorial Africa to the Guinea coast.

Here it was found by the Portuguese when they arrived, in 1482. Recognizing its value as a food, they carried the plant and its African name "banana," with the slaves whom they captured, from the Guinea coast to the Canary Islands.

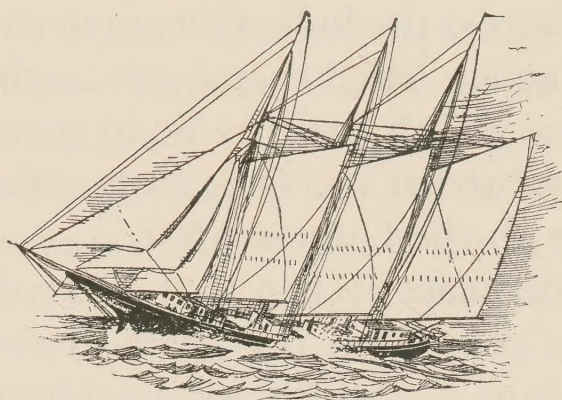
The next great step in the world journey of the banana was across the Atlantic to the New World. According to the consensus of scientific opinion it was not native to America; the ancient Indian tribes of the Western Hemisphere had no word for it, nor did they leave among their records any pictures of the fruit or references to it.

Credit for bringing this valuable food-fruit to the New World belongs to the Reverend Father Tomás de Berlanga, one of the sturdy Spanish priests who always followed the conquering forces of their king. As a missionary he came in 1516—only a few years after the discovery of America by Columbus—to the island of Santo Domingo, bringing with him a few banana roots from the Canaries. Later he was made Bishop of what is now Panama, where he also introduced the banana. Other missionaries in succeeding years followed his example, for records show that when the location of a mission had been chosen, one of the first works was to see to the planting of bananas and plantains in order that there should be no lack of food.

When the banana in its westward travels reached the Pacific Ocean, its long journey around the world was complete.

Introduction to the United States

As late as the middle of the nineteenth century, travelers and naturalists wrote of the banana as a delicious fruit for the peoples of the tropics, but its possibilities, through modern transportation, as a staple food for the inhabitants of the temperate zone were not at that time realized.



Banana Schooner "Jessie Freeman"—1883

It is supposed that the first bananas brought to the United States came from Cuba to New York early in the Nineteenth Century. By 1850 clipper ships were bringing occasional small

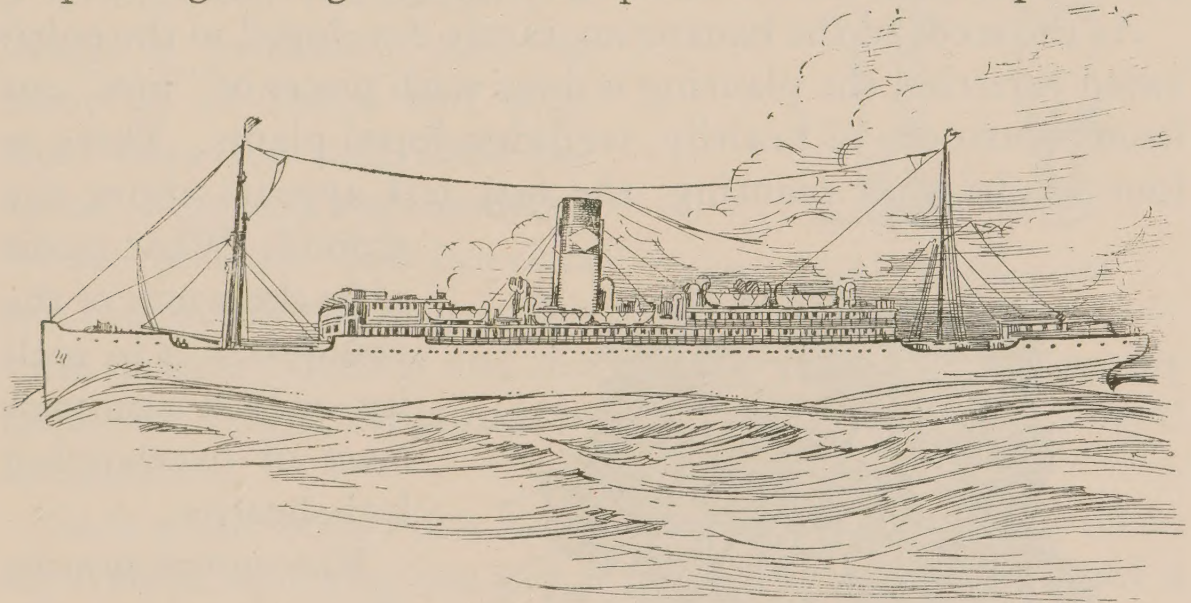
cargoes, and soon after the Civil War, Carl B. Franc, who had been a ship's steward, started the first regular importations. The fruit was from the present Panama Canal Zone.

In 1871 a young New Yorker named Minor C. Keith went to Costa Rica to aid his three brothers in their attempt to build a railroad there. The first 25 miles cost 4,000 lives, including those of his three brothers. Keith, however, surmounted the most heart-breaking disasters, carried on the construction and laid plans to assure freight for the railroad. To this end he got some banana roots from Carl Franc at Colon and started banana plantations in Costa Rica. In due time he began regular steamer shipments to New Orleans, and later to New York. At this time the fruit was looked upon in the United States as a curiosity and a rare tropical luxury.

Meanwhile, in 1870, Captain Lorenzo D. Baker, of Cape Cod, had taken a party of gold seekers to Venezuela in his schooner, *Telegraph*. For want of a return cargo he brought as a venture a few bananas from Jamaica to Boston. The voyage was a fortunate one, and its success attracted the attention of some Boston merchants, notably Andrew W.

Preston, who joined Captain Baker in making further importations. Despite vicissitudes of fortune they persisted in the endeavor and in 1890 formed the Boston Fruit Company and materially extended their field of operations. When, in 1899, the Boston Fruit Company and the interests of Minor C. Keith were merged in the formation of the United Fruit Company, ample capital and resources were for the first time made available for large scale operations in the banana industry. Today, in spite of the banana's highly perishable nature, the dealer and consumer throughout the country are able to secure without delay and at reasonable prices a regular supply of this fruit the whole year round.

On its plantations about the Caribbean the United Fruit Company produces bananas, sugar, cacao and coconuts for export to North America and Europe. It maintains in the tropics eight large modern hospitals with field dispensaries



Modern Banana Steamship of the "Great White Fleet"

where one hundred and fifty thousand persons, including employees, receive the benefits of this medical service annually. It also maintains in its tropical divisions agricultural experiment stations with a view to constantly improving banana culture and for the study of various tropical products.

This company is also an important factor in transportation,

operating 1,540 miles of railways in the tropics, while its "Great White Fleet" comprise one hundred steamships.

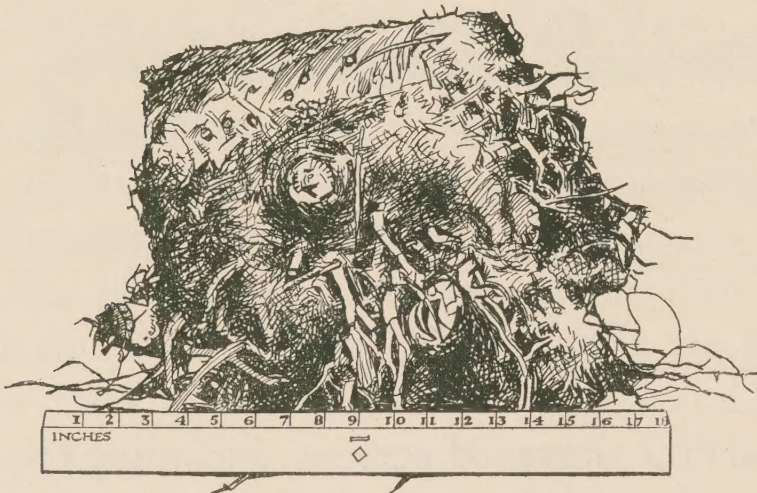
How the Banana Grows

Bananas are the product of a rapidly growing plant, commonly called a tree, which at maturity reaches a height of 15 to 30 feet, with a diameter at the base of 9 to 16 inches, according to climatic and soil conditions. When fully developed, the immense leaves spread out gracefully from the main stem, giving the plant the appearance of a huge palm. These leaves adapt themselves in interesting fashion to sunshine and shade. When the rays of the sun are too intense, the sides of the leaves collapse and hang together, preventing excessive evaporation; in wet weather, on the other hand, the upper surfaces of the leaves become concave, so as to benefit from the cooling influence of the rain.

As the seeds of the banana are rarely developed in the cultivated varieties, the planting is done with pieces or "bits" cut from rootstocks of healthy, well-developed plants. Three or four weeks after planting, the first leaf appears above the

ground. What seems to be the trunk of the young tree is in reality only a compact mass of overlapping leaf-sheaths.

Nine or ten months after planting, the stem which bears the fruit pushes its way up through the center of the "trunk"



Close view of Rhizome, or Rootstock

and the flower-bud bends over and down, resembling a large ear of corn enveloped in its husk. The outer covering later drops off, revealing the tiny bananas pointing downward.

These young bananas gradually turn upward as they increase in size. Thus, in contrast to its position on the tree, the bunch, as displayed in the retail stores, is really upside down.

Thirteen to fifteen months after the planting, a bunch of bananas is ready for cutting. This is made up of clusters called "hands," each with 10 to 20 individual bananas or "fingers." The bunches usually have from 6 to 9 hands. The weight of a 9-hand bunch ranges normally from 50 to 65 pounds. A considerable number of bunches have more than 9 hands, and occasionally a bunch is produced with as many as 22 hands and with more than 300 individual bananas, weighing approximately 150 pounds. The heaviest and best developed fruit comes from Central America and the lightest fruit from Cuba, the difference being explained by varying conditions of soil and climate.

Each plant bears but a single bunch of bananas, and when the fruit is harvested the tree is cut down. At intervals of a few months a new bunch is ready to be harvested from a plant which has sprung from the same root. This process continues for a period of about ten years.

The average annual banana production per acre is 125 to 150 bunches in Central America and 200 to 250 bunches in Jamaica, where cultivation is practiced more intensively. Production figures vary according to soil, climatic conditions and cultivation methods used.



"Sword Sucker" Six Months Old

Where the Banana Grows

Bananas are grown in practically all the moist tropical countries, where they constitute one of the principal foods. While they can be cultivated in sub-tropical zones, their production to the best advantage demands a hot climate and considerable rainfall. They grow best in fine, sandy loam with good underdrainage. In certain districts where the soil is good but the rainfall insufficient, irrigation is practiced; this is possible only where an abundant water supply is available, as the water requirement of the banana is enormous.

Exports, in bunches, of the principal banana-producing countries, for 1929, are approximately as follows:

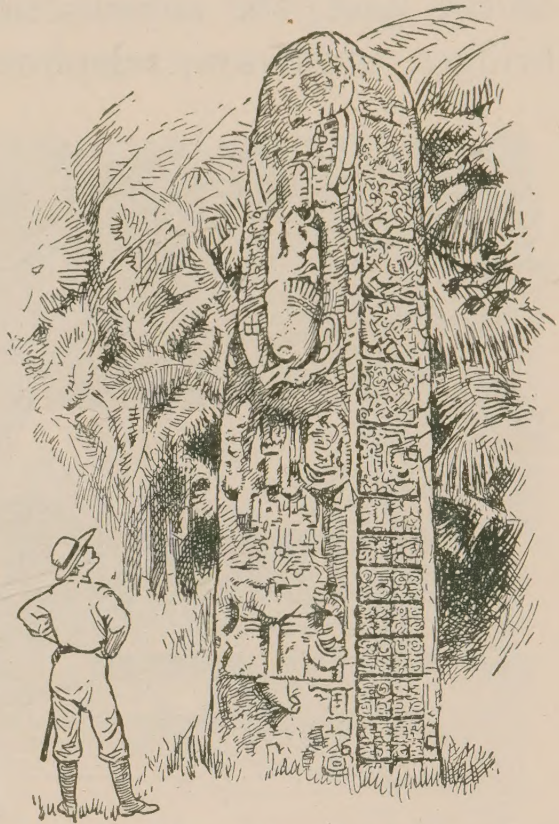
Honduras	28,221,000	Mexico.	5,602,000
Jamaica	22,021,000	Panama	4,722,000
Colombia	10,300,000	Nicaragua	4,161,000
Canary Islands	6,638,000	Cuba	3,683,000
Guatemala	5,871,000	British Honduras	675,000
Costa Rica	5,785,000		

The United States and Canada constitute the world's largest present-day banana market, their total annual consumption approximating 66,521,000 bunches, exported from the Caribbean countries. A small quantity (about 200,000 bunches) is shipped to San Francisco from the Hawaiian Islands. Banana imports of Great Britain and continental Europe now reach 33,000,000 bunches annually and are obtained chiefly from the Caribbean countries and the Canary Islands.

The Modern Plantation

The Atlantic coast of Central America offers ideal conditions for banana culture. In this region extending a few miles back from the Caribbean Sea, at an elevation not more than 250 feet above sea level, where there are hot days, humid nights and an annual rainfall of 80 to 200 inches, the tropical jungle has given way to the greatest banana farms of the world.

These lowlands were invaded about 1000 B.C. by the Mayan Indians, who established a remarkable empire lasting through many centuries. During the first six centuries of the Christian Era they built cities with splendid temples and public buildings. Some of their monuments are found today in Guatemala, Honduras and Mexico. The Mayas achieved a high state of civilization only to be beaten down and swept away by the forces of disease. As a result, the land returned to its wild state during the lapse of many centuries. The banana industry, created by American enterprise and capital, has applied sanitation and preventive medicine in rehabilitating these lowlands, once the seat of an ancient empire.



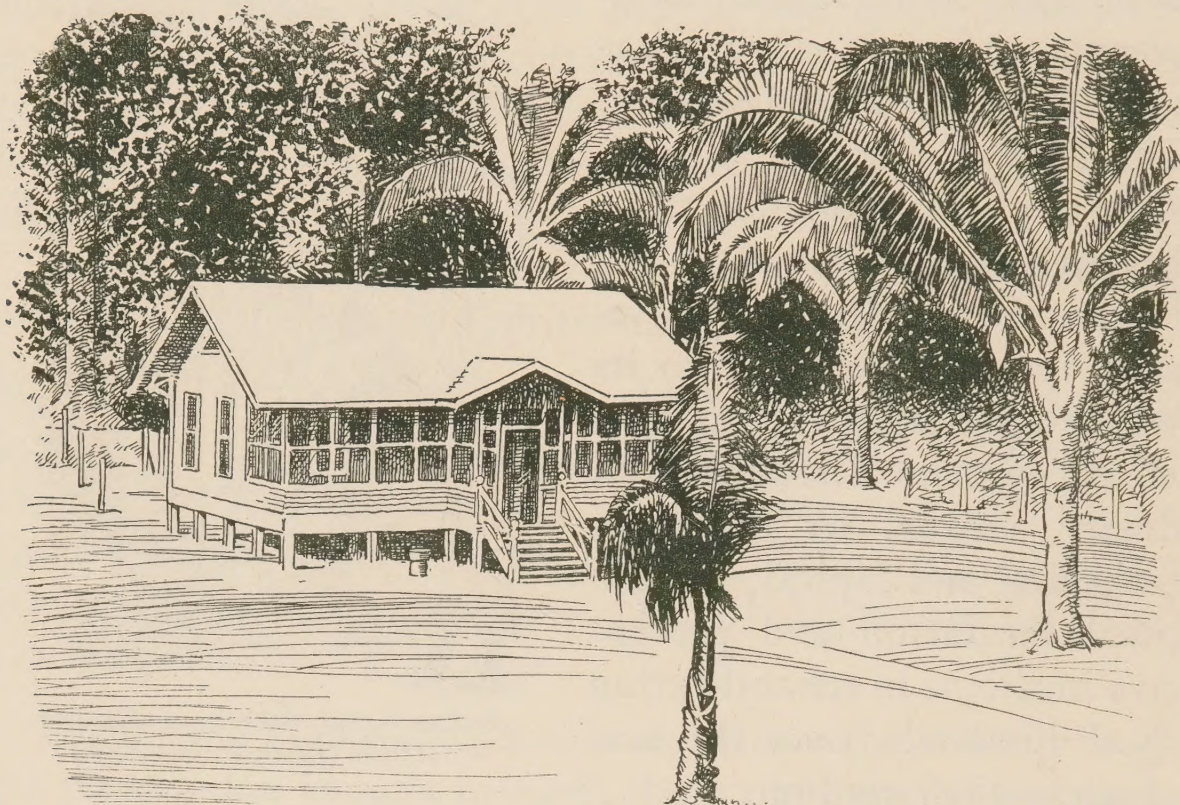
Ancient Mayan Monument in Banana Plantation, Quirigua, Guatemala

A modern banana plantation is a striking example of extensive farming, all the more impressive because of its setting of primeval jungle. In the transformation, within a few years, of an untamed wilderness of tropical growth into a vast tract of cultivated land, there is a succession of steps wholly new to persons familiar only with farming operations in the temperate zone.

In establishing the new plantation* many factors must be considered, such as climate, soil, rainfall, drainage, a shipping port, the risk of damage by floods and hurricanes, and

*The term "plantation" as used here refers to a new tropical division, created from virgin territory, and comprising a group of connected banana farms with the equipment necessary for their unified operation.

the feasibility of securing labor and supplying transportation. The area under consideration is first thoroughly explored as to its fitness for banana cultivation. Next come the surveying of the land, the construction of a wharf, initial railroads, bridges, tramways, telephone lines, buildings, the clearing



Overseer's House, Set on Concrete Posts and Screened

of the underbrush, the digging of the main drainage ditches, and, finally, the planting. Then follow the gradual development and extension of the plantation until vast areas are pouring their product with regularity into the holds of the steamships at the loading ports.

It is essential that a supply of foodstuffs and merchandise be made available at reasonable prices. Hospital treatment must also be provided in event of sickness or accident, and the general sanitary condition of the plantation and the welfare of its employes must be properly looked after in order that an efficient organization may be maintained.

To dispatch, at frequent intervals, a cargo of from 45,000

to 85,000 bunches of freshly-cut fruit requires a vast area of good producing land, connected with the tropical ports by extensive railways. These in turn are fed by a network of light tramlines. On the farms the number of riding, work and pack animals required amounts to thousands.



Underbrushing, "Lining" and Planting—Pile of "Bits" in Foreground

The land, when originally surveyed, is laid out in sections of a size convenient for the allotment of the work and for the keeping of proper records of operating costs and production. Once cleared, it is marked out so as to assure the regular arrangement of the plants in rows. Pieces of rootstock, weighing 3 to 4 pounds each, are selected and carefully planted in holes about 12 inches deep with the eye, something like the eye of a potato, downward. The planting distance is about 20 feet each way. From each of these "bits" of root, shoots spring up on all sides, but only the most vigorous are allowed to develop to maturity. These, with their intermingling roots, form in time a kind of clump or "mat."

Of course some "bits" fail to grow, and the vacancies are filled by using shoots, about six months old, cut from mature

plants on adjacent farms. These plants are called "sword suckers" and the practice is known as "supplying." [See p. 9.]

With the completion of the planting and before the young plants have appeared above the ground, the larger trees are felled, the dense growth making this operation laborious and expensive. At this stage the plantation resembles a heavy forest devastated and laid flat in a confused mass, rather than a banana farm in the making. To the uninitiated it might appear that the felling of the trees on the newly planted ground would destroy the young plants. This, however, is not the case, as the young plants grow up around the fallen logs. The enormous quantity of felled forest growth covers the ground like a mulch and, instead of being destructive,



Banana Plants of Three, Six and Nine Months' Growth

actually establishes the most favorable conditions for the growth of the banana plants.

Through this debris must be cut the right of way for the narrow gauge tramways and roads that have been planned.

Telephone wires are run to each farm so that the necessary orders may be issued promptly with respect to cutting and shipping the fruit.

A large force of laborers is constantly required to keep in check the riotous tropical vegetation and to give each banana farm its cleaning and "supplying" at the proper time. In the course of these various cleanings, much of the original felled growth is carried off or decays, although the stumps and logs of the larger trees may remain. Drainage ditches and innumerable small bridges for the tramroads require almost constant attention and repair.

It is a race against time to accomplish all of this, and the uncertainty of Nature's elements constitutes the chief hazard. Owing to the heavy and irregular rainfall, both farm and construction work are continually interrupted. The most promising outlook may be turned into disaster by windstorms, sudden floods or prolonged drought, and months of time and labor lost. All these conditions necessitate frequent revision of the estimate of the banana output of each farm.



Flower-Bud with Outer Covering

To Market!

Despite the difficulties of cultivation, the great problem of the banana industry—the one which has made most demands upon the genius of modern invention—is the necessity for careful handling and quick transport of the fruit from the plantation to the ripening room of the wholesale dealer.

When the word comes by radio to have a cargo delivered at

the tropical port for the steamship, already on its way, preparations for harvesting are begun. Every effort is made to have the bananas arrive at the loading port as soon as the

steamship is ready to receive them, as well as to have the fruit loaded in the briefest possible time.

Bananas are always harvested green, even when they are to be eaten in the tropics. If allowed to ripen on the plant, the fruit loses its delicious flavor, the skin bursts open and the ripening pulp becomes the prey of insects.

Since the fruit is in various stages of development, a practiced eye is required to select the bunches of proper grade for shipment. At daylight, the cutting gang—consisting of the “cutter,” the “backer” and the “mule-man”—begin work. The cutter, using a long pole with



A Young Bunch of Bananas

a special knife fitted to one end, nicks the tree, a few feet below the bunch, causing it to bend where it has been cut. The bunch is allowed to swing down easily, and the backer receives it on his shoulder. Then the cutter with a long knife (machete) severs the bunch from the stalk, and the backer carries it to the nearest packroad or tramline, where it is loaded either on a pack mule or on one of the little tram cars which run to almost every part of the plantation.

In one of these ways the fruit is carried to the main railroad and there transferred to waiting cars under the watchful eyes of inspectors who exclude all imperfect bunches. On arrival

at the wharf the banana train is moved alongside the waiting steamship. Here a crew of laborers transfers the fruit to the loading machines, which carry the bunches, one by one, in an endless chain of canvas pockets over the side of the ship and into the holds, where experienced stevedores carefully stow the fruit. All this is accomplished under the most rigorous inspection, and any damaged or defective bunches are rejected. A cargo of 75,000 bunches is usually dispatched in about 12 hours. [See p. 19.]

The holds of all banana-carrying steamships are divided into several "decks," each partitioned into a number of compartments and bins of convenient size. These bins, which are constructed of wooden bars, similar to the "old farm gate," keep the fruit from shifting and becoming bruised.

In transporting banana cargoes there are three principal opposing factors to contend with, namely: heat, humidity and vitiated air. The problem is to carry the fruit well ventilated and within a narrow range of temperature. For successful ocean transportation both refrigerated and naturally ventilated vessels of special design are used. As by far the larger number of ships engaged in the banana trade are equipped with refrigerating machinery, this is the type described here.



In Harvesting, the Tree is Cut Down

The holds are heavily insulated with cork, cowhair or other suitable material. The fruit is cooled to the required temperature with fresh air circulated by powerful fans over



"Backing" the Bunch

brine coils and then through the compartments. Carbonic acid gas (CO_2) is the agent used in the refrigerating machines to cool the brine.

Refrigeration as applied to bananas is treatment with cooled, fresh air and should not be confused with the usual cold storage operation, in which very low temperatures are essential. Although banana cargoes are carried at a considerably higher temperature than meat, the refrigerating equipment is much more powerful. The reason is that meat is already chilled when loaded, while bananas are not only warm when put aboard ship, but generate considerable heat during the voyage.

As soon as the fruit is loaded, every effort is made to reduce as quickly as possible the temperature of the holds to about 57°F. , and to maintain it at that point throughout the voyage. Constant care is given the fruit, and at frequent and regular intervals—day and night—the temperatures in each compartment are carefully recorded. Sometimes, when the fruit is being transported to northern ports during the winter months, it is necessary to supply heat to prevent damage by chilling.

Unloading is done at most domestic ports with machines like those used for loading in the tropics. At some ports the bunches are passed by hand from the holds to the wharf.

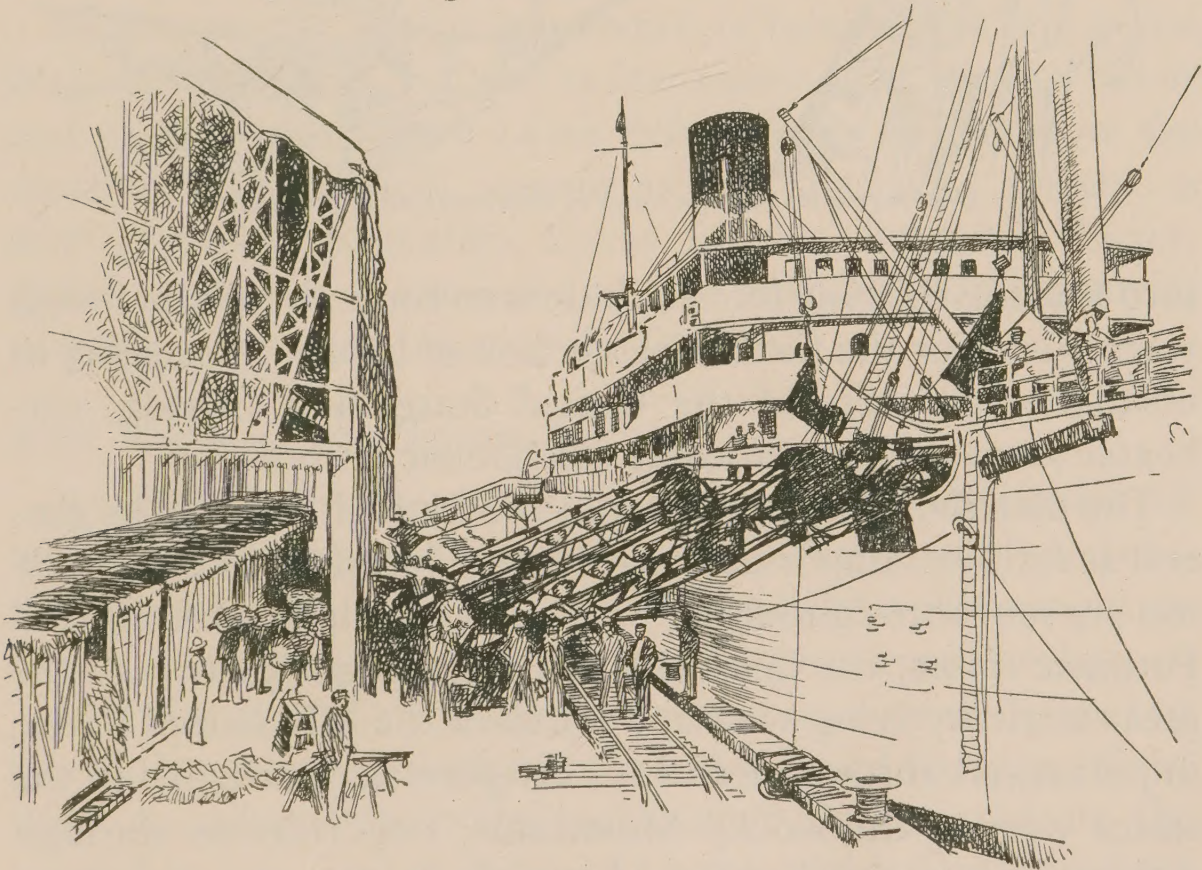


"Packing" Bananas

Bananas are inspected and weighed at the seaboard by men

especially appointed or licensed to do this work. The inspection is very rigid and any fruit showing evidence of damage or a degree of maturity which forecasts too early ripening, is not shipped to the interior, but is sold locally.

Fast-moving trains of 50 to 75 refrigerator cars carry the fruit into widespread territory. As a part of its service to customers, the larger banana importers furnish caretakers, called "messengers," who inspect the cars and take temperatures; report on the condition of each car in transit; and make any changes in ventilation, icing or heating necessary to insure its arrival in good condition. They either accompany the trains from seaboard or are stationed inland at strategic divisional and junction points.



Loading the Banana Cargo by Machinery

During the warm season the cars are usually iced, with due regard for weather conditions and the distance to be traveled. Car ventilators are carried partly open, to provide the right amount of fresh air to preserve the vitality of the fruit

and at the same time to prevent over-refrigeration. In the winter season the cars are papered and heated. If unusually cold weather prevails, the cars for distant points are switched



Discharging the Banana Cargo by Conveyors and Endless Belts

into heating sheds at interior points en route and treated with warm air. For the further protection of banana shipments to northwestern parts of the United States and Canada, car-heater stoves are provided at convenient points.

The distribution of bananas in the United States is in general as follows: Importations through Gulf ports and Charleston are sent throughout the Southeast, south of the Ohio and Potomac rivers, the Central West, including a portion of the great territory lying west and north of the Mississippi River; importations through Pacific Coast ports are marketed in the states west of the Rocky Mountains; importations through Atlantic ports are distributed mainly in the eastern states, the territory north of the Ohio and the Potomac, as far west as Columbus, Cleveland and Detroit. Bananas are now imported directly into Canada through the ports of St. John, Halifax and Montreal. In the summer months, the fruit finds its way to points even beyond the Arctic Circle.

An important link in merchandising is the careful handling and proper ripening of the green fruit in the banana rooms of the wholesale dealers. The bunches are hung, for a period of about one week, in specially equipped rooms at temperatures normally ranging from 62° to 66°. In ripening bananas, three essential requirements must always be met: proper temperature, humidity and ventilation.

Bananas are sold to the wholesale trade on the weight basis. Retailers also sell them by weight or by the dozen. To avoid tearing the skin and exposing the pulp, the careful retailer always cuts, never tears, his bananas from the bunch or hand. In the case of single, detached bananas, purchasers should always insist that this be done.

In Europe, the display of a bunch of bananas for sale in the fruit stores is rare. The fruit is first ripened, cut up into hands and packed in standard boxes before being delivered to the retailer. This method, known as the "flatting" system, is now practised generally. Great Britain, Belgium, France, Spain, Holland, Germany and the Scandinavian countries consume large quantities of the fruit.

*Food Value of the Banana**

A staple food is one that is abundant, always obtainable, of moderate cost and high food value, as well as palatable and easily digested. The banana fills every one of these requirements and is, moreover, sealed by Nature in a germ-proof package.

It is one of the few fruits that attain maximum flavor and food value when harvested green and allowed to ripen off the tree. As shipped from the tropics and discharged from the steamship, the fruit is green and hard, and its carbohydrate content is almost entirely starch.

During the process of ripening this starch is gradually

*These statements on the food value of the banana are based on the opinions of leading physicians and dietitians in the United States, Canada and Europe.

converted into easily digested sugars. When the peel is yellow, with the tip still green, only a portion of the starch content has changed to sugar. In this "partially ripe" condition bananas should not be eaten raw, but may be cooked in many tempting ways and used as a vegetable.

In the next stage, the "yellow-ripe," when all trace of green has disappeared even from the tip, and the pulp begins to soften, most of the starch has become sugar. The fruit now has a delicious flavor, and is easily digested. Further ripening, however, improves the banana and it is at its best when the peel is flecked with brown. Then practically all the starch is converted into sugar and the flavor is developed to its highest delicacy.

Since cold prevents proper ripening and the development of the fine natural flavor, bananas should not be kept in the ice-box unless they are fully ripe.

Any mistaken impression that bananas are difficult to digest is due to eating them before they are ripe. In this respect they do not differ from apples, pears, melons or any other fruit which, if eaten in an unripe state, may cause digestive disturbance. When ripe or when cooked in the unripe state, the banana is easily digested and possesses great value in the diet of both young and old.

Even in illness this fruit has a place. For example, in the treatment of chronic intestinal indigestion in children (celiac disease), scurvy, and inflammation of the kidney (nephritis), it has proved of great value.

Atwater and Bryant (*United States Department of Agriculture Bulletin No. 28*, revised edition, 1906) report the average composition of the edible portion of the banana, apple, orange and potato, as follows:

	<i>Water</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbo- hydrate</i>	<i>Ash</i>	<i>Calories Per lb.</i>
Banana	75.3	1.3	.6	22.0	.8	460
Apple	84.6	.4	.5	14.2	.3	290
Orange	86.9	.8	.2	11.6	.5	240
Potato	78.3	2.2	.1	18.4	1.0	385

The banana is not only a delicious fruit, but is one of the most important carbohydrate (energy-producing) foods. It is also an excellent source of vitamins A and C and a good source of vitamin B; furthermore, it contains an appreciable amount of the essential mineral salts.

Bananas, high in carbohydrate, and milk, rich in protein, make an ideally balanced ration; with the vitamins and mineral salts which both contain, they constitute a protective and nutritious food, of great value in the diet of children at home and in school.

The banana has a place in the menu of virtually every meal. For breakfast the fresh, ripe fruit is eaten sliced in milk or cream, with or without cereals. Partially ripe, it may be cooked in many ways and served as a vegetable; in the tropics it is often so used and makes an excellent substitute for the potato. As an entree, banana fritters are especially pleasing. To fruit cocktails and the fruit salads, ripe bananas give not only flavor but substantial food value, while for desserts, served in many attractive ways, they are delicious and wholesome. Bananas sliced with other fruits, especially with apples, oranges or grapefruit, make a very desirable and appetizing dish. As a fresh fruit, eaten alone or in combination with other fruits and for salads and desserts, the sugary, ripe banana should always be used.

Measured in terms of food value, the banana costs on the average throughout the year less than any of the other fresh fruits and most of the common vegetables.

Economic Importance of the Banana Industry

The history of the banana trade is one of the great romances of business. From small beginnings, hardly more than a generation ago, it has developed into a great industry which is a potent factor in the commercial life of the countries producing and exporting the fruit.

To make the tropics safe for men to live in, the United

Fruit Company carries on extensive sanitary operations within the zone of its activities. It has also created a comprehensive system of modern hospitals and dispensaries for the benefit of both employes and non-employes in the countries where it operates. Invaluable contributions are constantly being made by its medical staff to the treatment of tropical diseases.

All in all, there can be no greater evidence of the economic value of the banana than the fact that it has justified the devotion of so much scientific skill to solving the problems connected with its cultivation in the tropics and its transportation to world-wide markets. Of marked significance, too, are the facts that the banana has helped in our better understanding of and relations with the Central American republics, and that these countries now enjoy efficient and constant steamship service, better radio and cable facilities, and a more stabilized currency.

Today the wider utilization of the banana is recognized by economists as an important factor in the problem of supplying the demand of an increasing world population for staple foods.

The following publications may be obtained on request without charge from the United Fruit Company, 1 Federal Street, Boston, Mass.:

The Food Value of the Banana, a compilation from recognized authorities.

Bananas in the Modern Manner, a collection of recipes, menus, and suggestions for housewife and hostess.

